FIG.1

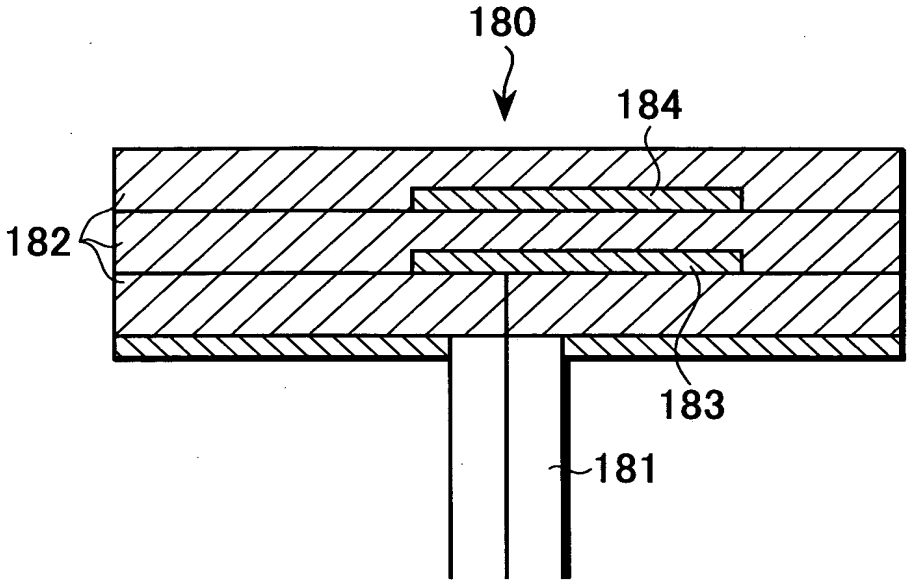


FIG.2

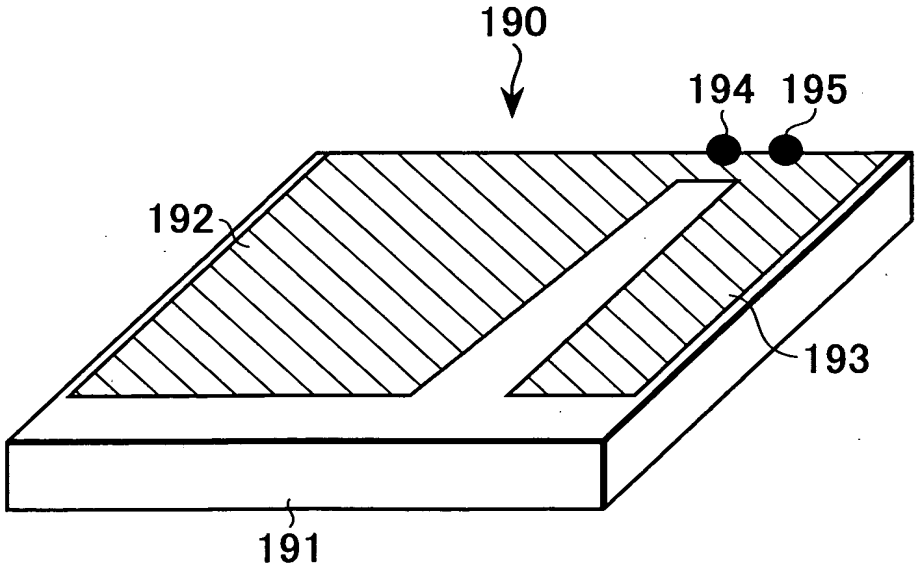


FIG.3

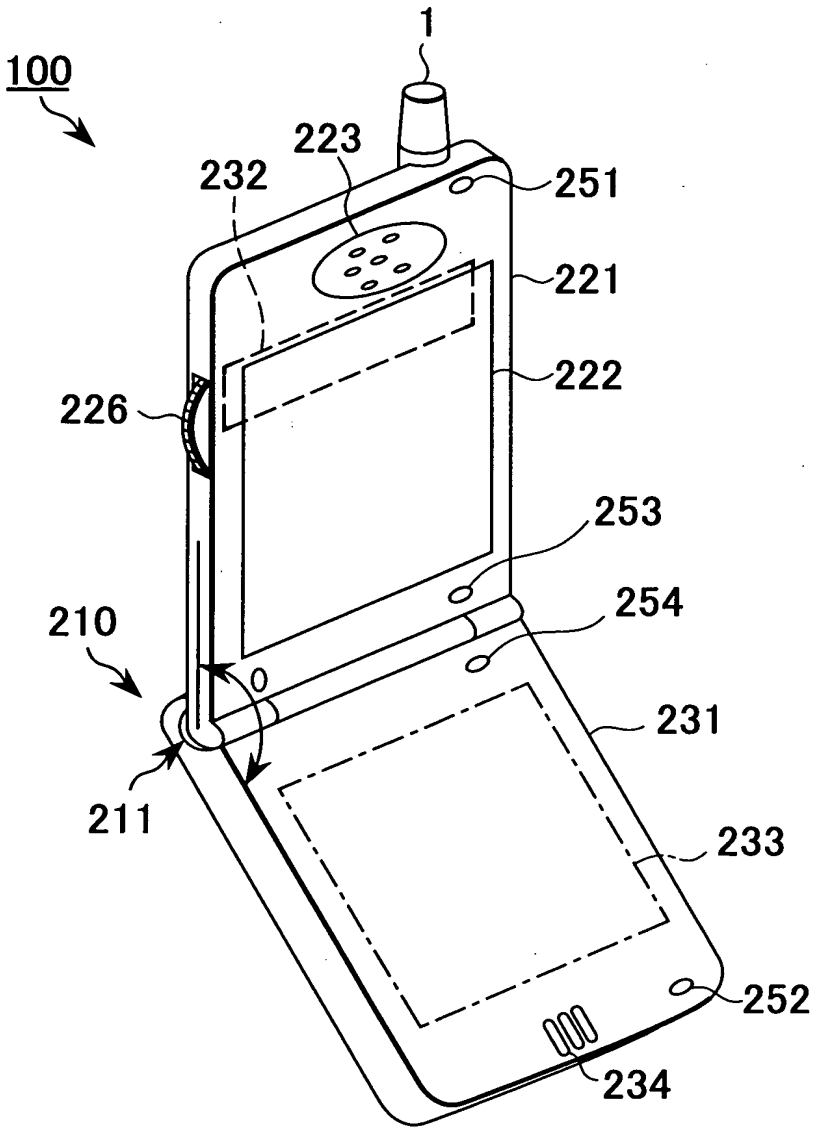


FIG.4

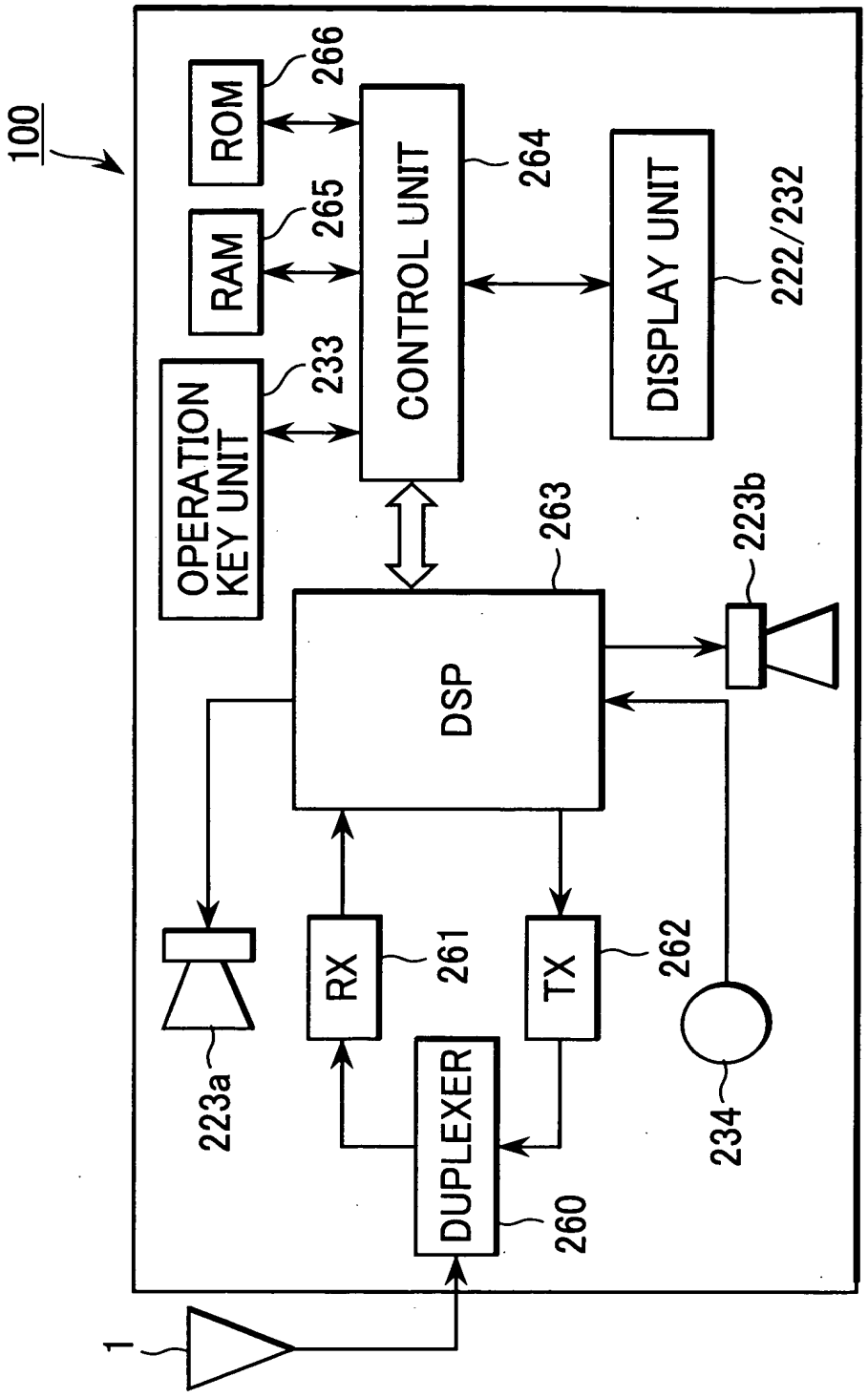

100
ROM
266
RAM
265
CONTROL UNIT
264
DISPLAY UNIT
222/232
OPERATION KEY UNIT
233
DSP
263
223b
RX
261
TX
262
223a
DUPLEXER
260
234
1

FIG.5

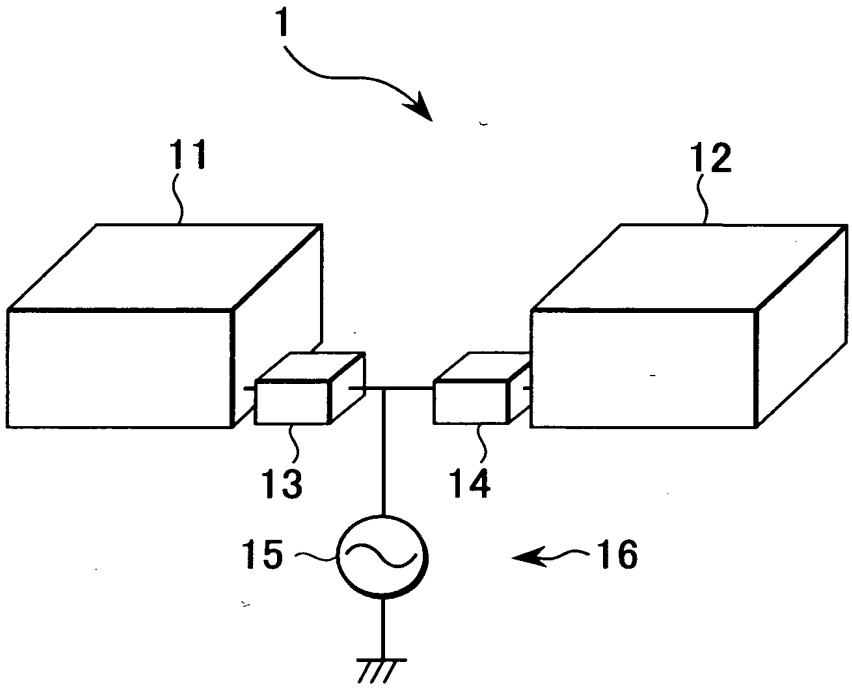


FIG.6A

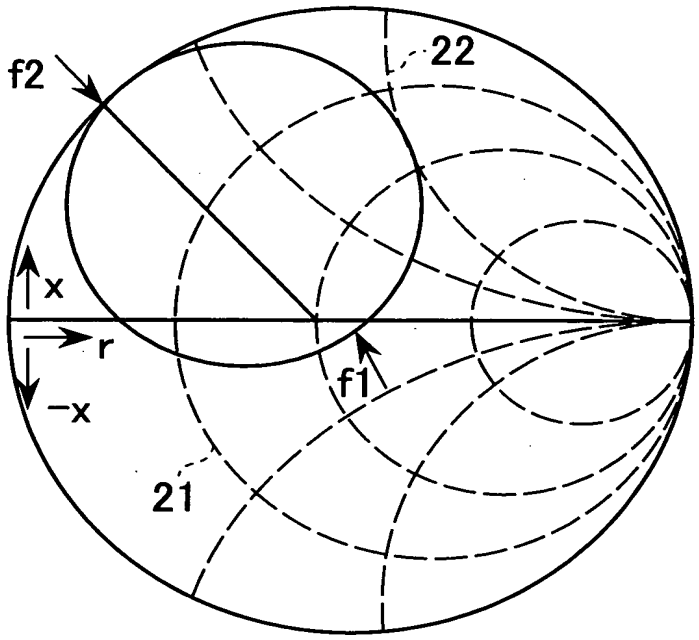


FIG.6B

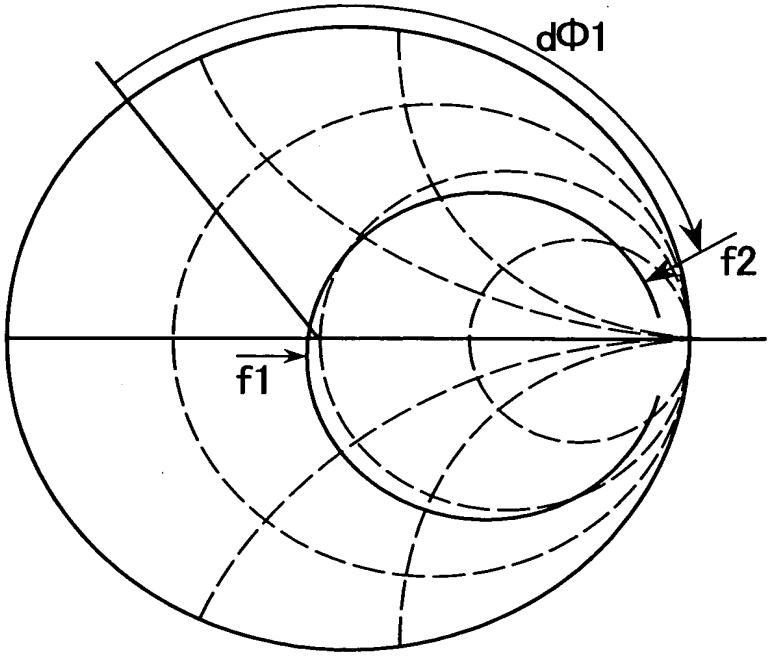


FIG.7A

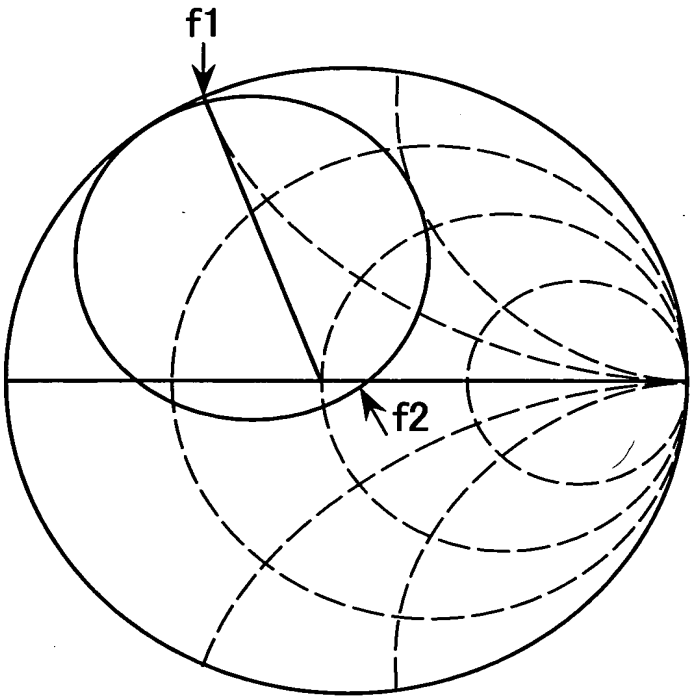


FIG.7B

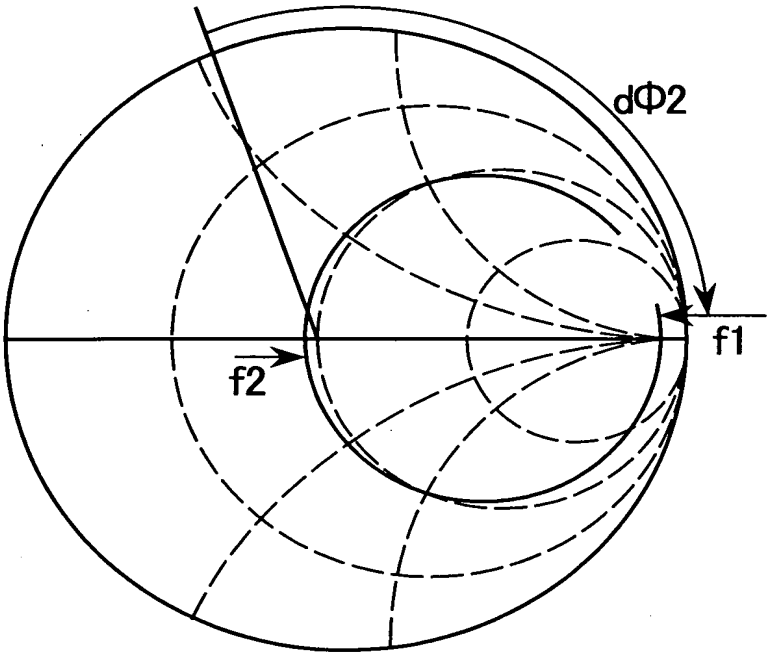


FIG.8

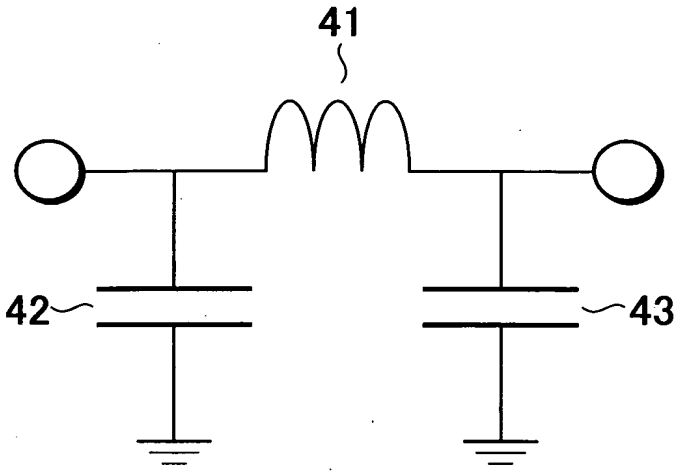


FIG.9

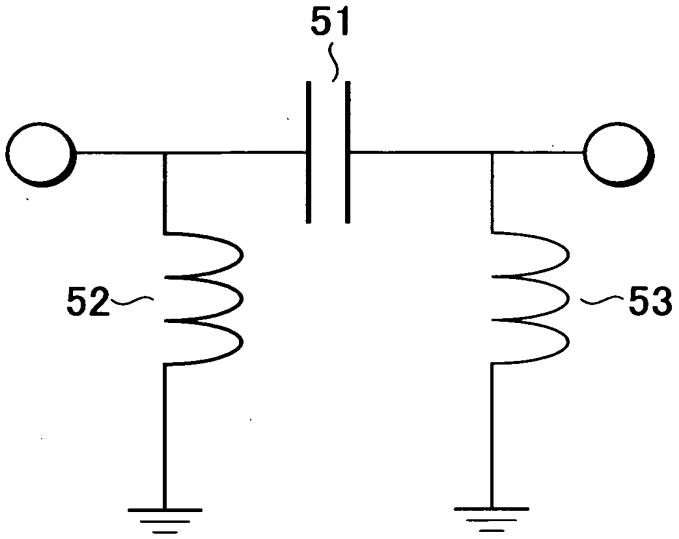
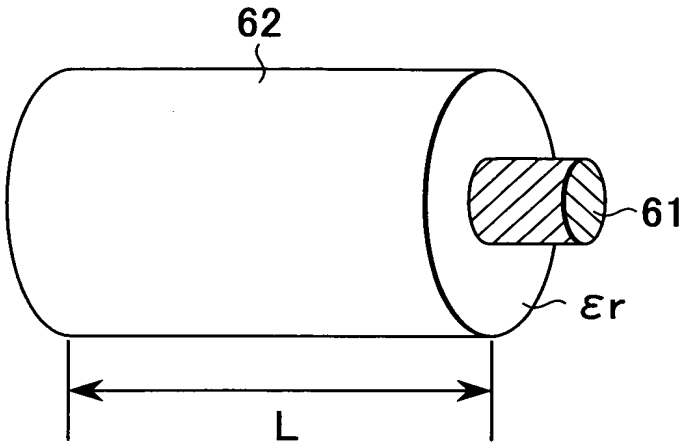
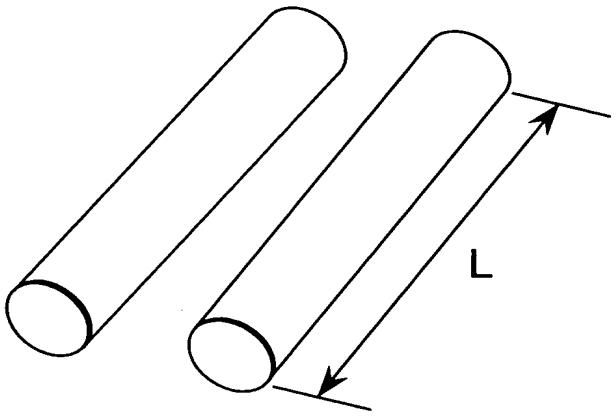


FIG.10



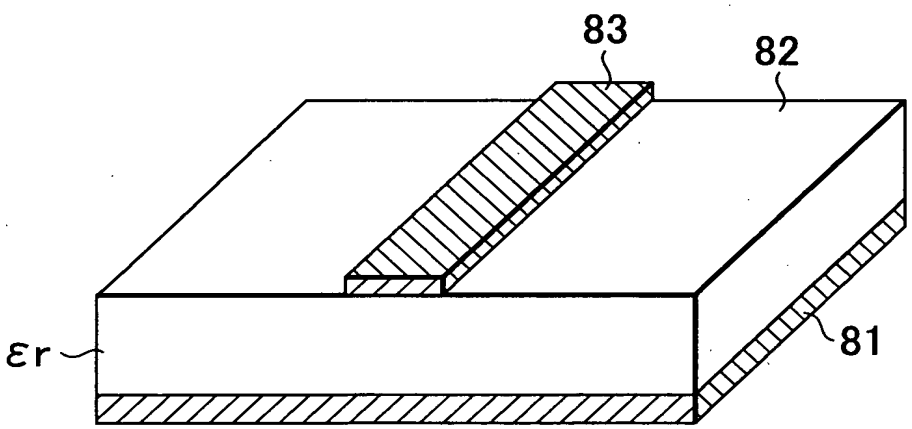
$$d\Phi = \frac{L}{\sqrt{\varepsilon r}} \times \frac{360}{\lambda} [\mathrm{deg}]$$

FIG.11



$$d\Phi = L \times \frac{360}{\lambda} [\mathrm{deg}]$$

FIG.12



$$d\Phi = \frac{L}{\sqrt{\varepsilon eff}} \times \frac{360}{\lambda} [deg]$$

FIG.13

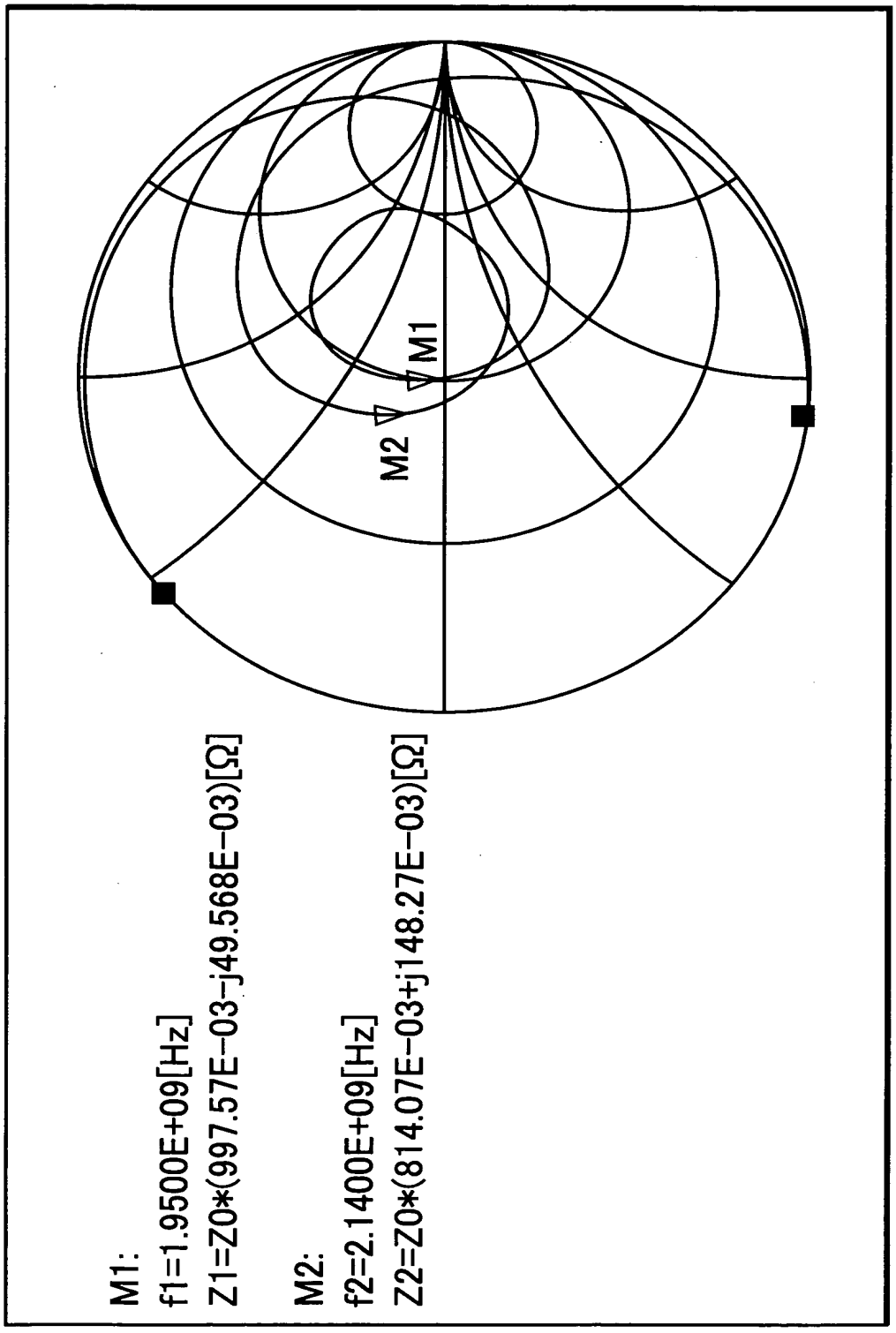

M1:
f1=1.9500E+09[Hz]
Z1=Z0*(997.57E-03-j49.568E-03)[Ω]
M2:
f2=2.1400E+09[Hz]
Z2=Z0*(814.07E-03+j148.27E-03)[Ω]
M1
M2

FIG.14

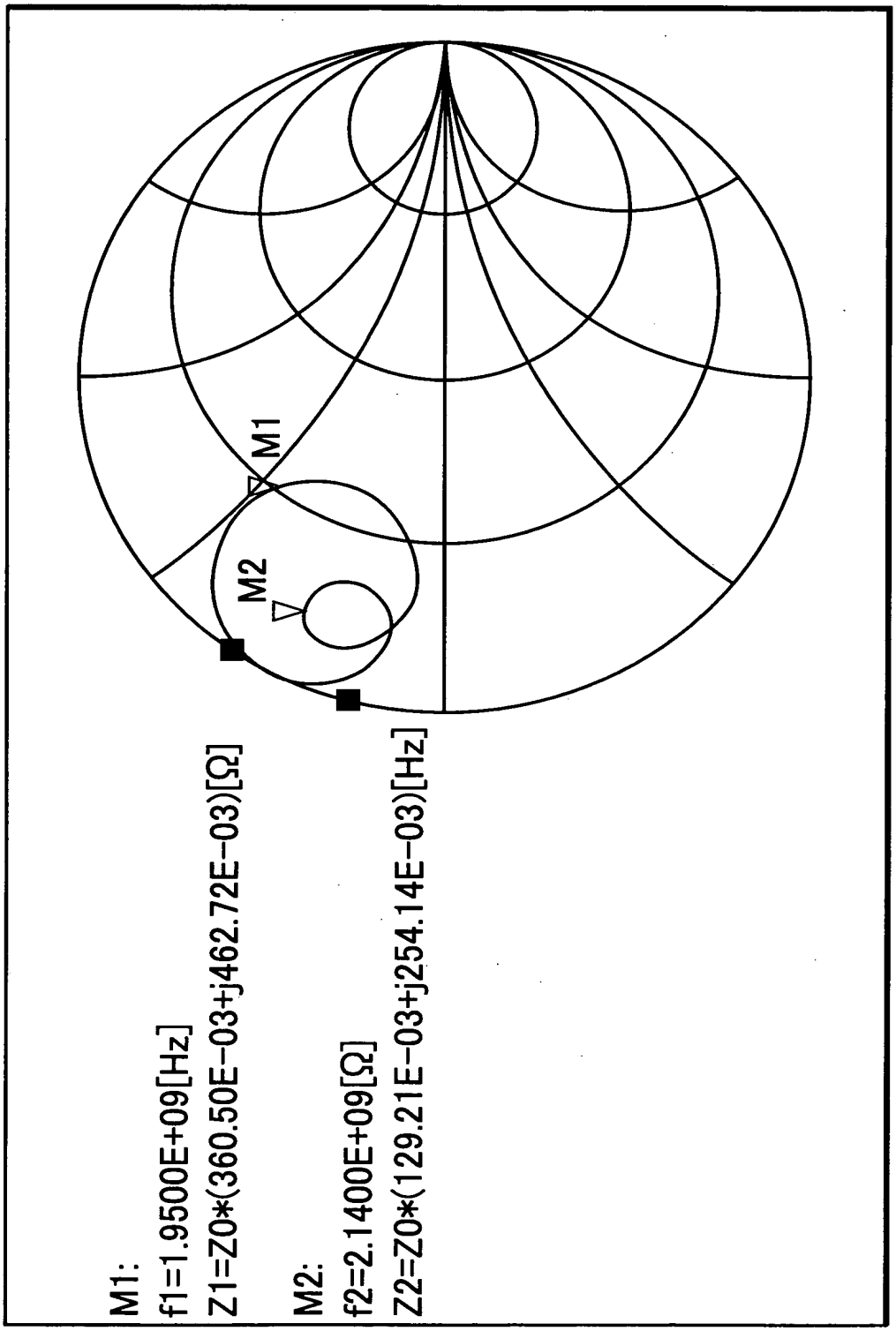

M1:
f1=1.9500E+09[Hz]
Z1=Z0*(360.50E-03+j462.72E-03)[Ω]
M2:
f2=2.1400E+09[Ω]
Z2=Z0*(129.21E-03+j254.14E-03)[Hz]
M1
M2

FIG.15

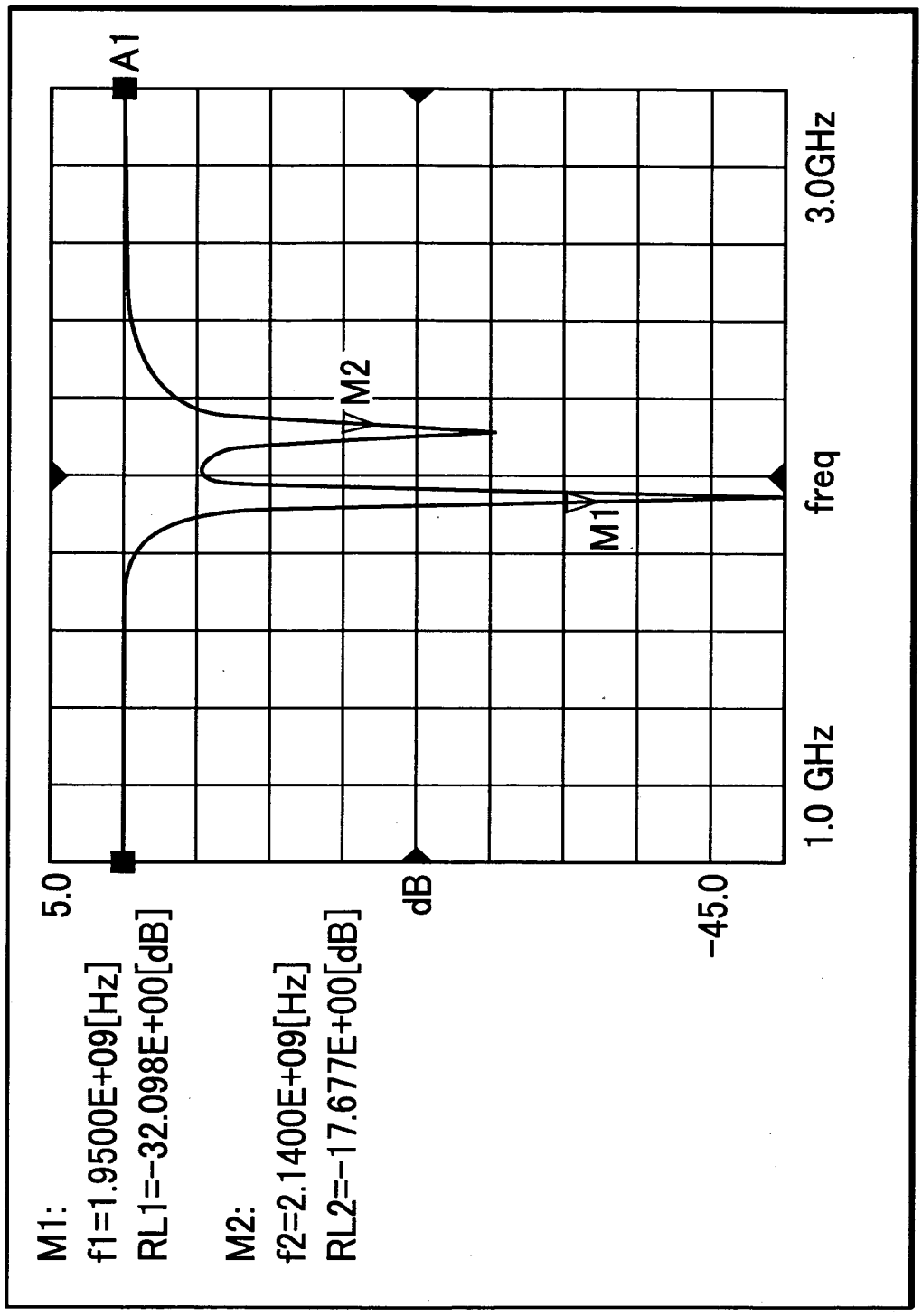

M1:
f1=1.9500E+09[Hz]
RL1=-32.098E+00[dB]
M2:
f2=2.1400E+09[Hz]
RL2=-17.677E+00[dB]
5.0
dB
-45.0
1.0 GHz
freq
3.0GHz
A1
M1
M2

FIG.16

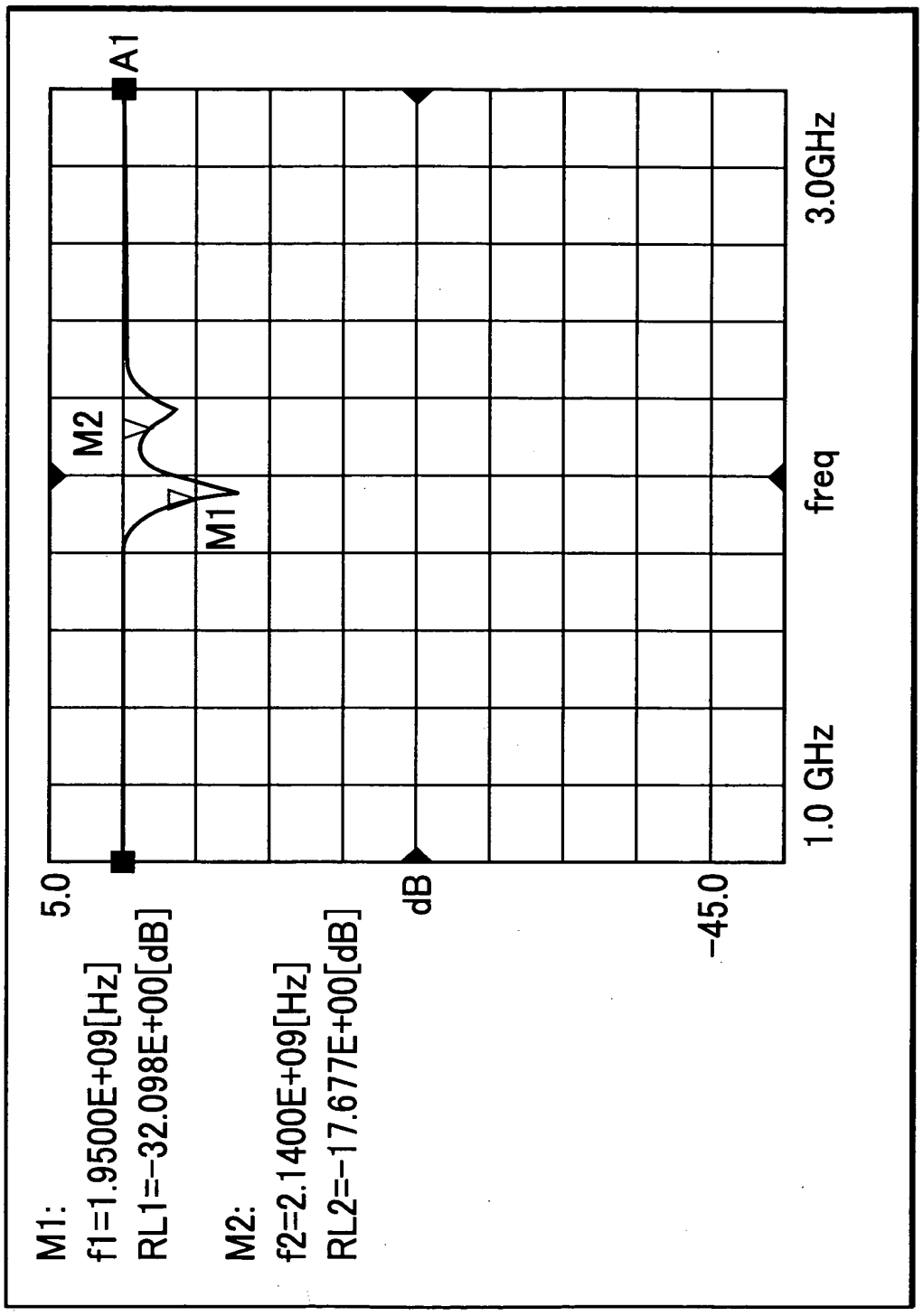

M1:
f1=1.9500E+09[Hz]
RL1=-32.098E+00[dB]
M2:
f2=2.1400E+09[Hz]
RL2=-17.677E+00[dB]
5.0
dB
-45.0
1.0 GHz
freq
3.0GHz
A1
M2
M1

FIG.17

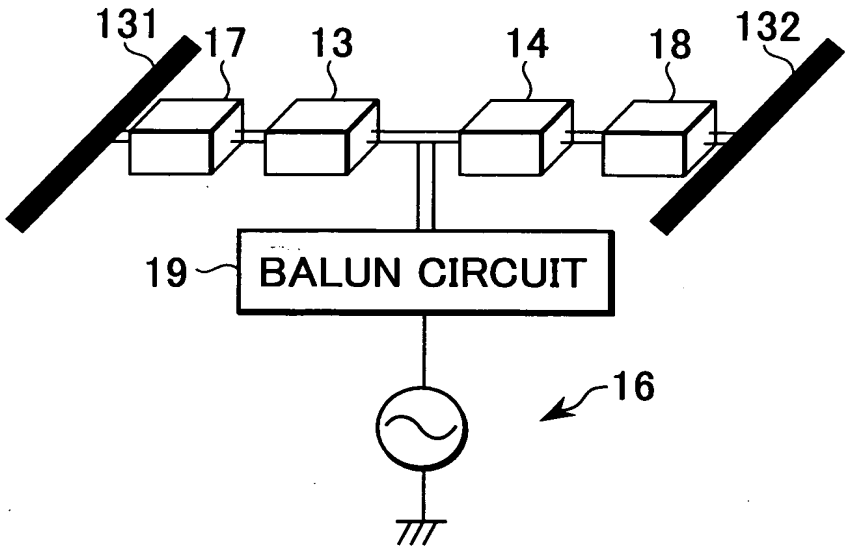

131
17
13
14
18
132
19
BALUN CIRCUIT
16

FIG.18

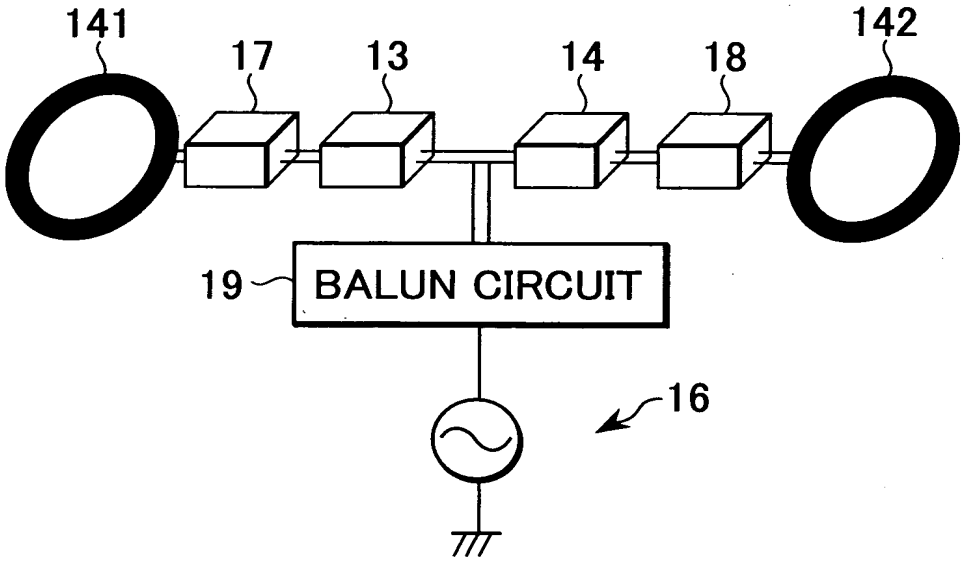

141
17
13
14
18
142
19
BALUN CIRCUIT
16

FIG.19

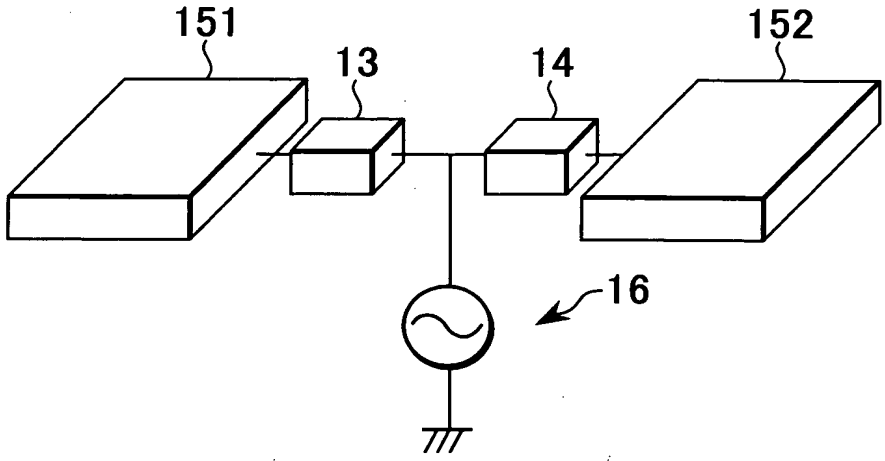


FIG.20

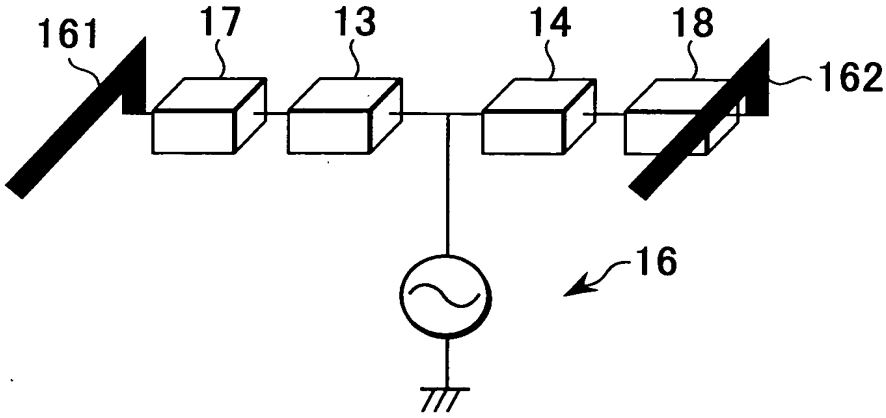


FIG.21